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## THE

## AMERICAN LAW REGISTER.

#### APRIL, 1891.

#### THE LAW OF SUBTERRANEAN WATERS.

The law affecting water courses, so far as that term is applied to surface streams or water collected into bodies having a known and visible course, may be regarded as, by this time, well and long settled, whether governed by the maxims of the common law Aqua currit, et debet currere, ut solebat currere and Sic utere tuo ut alienum non lædas, from which nearly, it not all, the rules affecting the use of water in streams are derived; or by the law existing in California and perhaps in some of the other States, which recognizes the right of appropriation as well as of use in water. Subterranean waters, however, have, even of late years, been the subject of considerable litigation; the law governing them has been a matter of debate, and so far as it has been settled, may be regarded as quite a modern head of jurisprudence.

#### 1. Classes of Subterranean Waters.

Subterranean waters may be of two sorts; they may be percolations, that term in law including percolations in the strict sense and small undefined unknown streams, or they may be underground rivers, such as exist in some limestone regions, which differ from overground streams in scarcely anything besides the fact that their course cannot be readily discovered from the surface of the earth. Of streams of this latter character we shall speak before the close of this article; at present we turn our attention to the law governing percolations, using that word in the sense suggested above and

adopting the definition of WHITMAN, J., in *Mosier* v. Caldwell (1872), 7 Nev. 363:

Any flowage of subsurface water other than that of a running stream open, visible and clearly to be traced.

Which definition we may modify by striking out the words "open" and "visible."

2. Ordinary rules governing water courses not applicable to percolating waters.

The ordinary rules of law, by which surface water rights may be acquired by prescription, and according to which their enjoyment must be regulated, do not apply to percolating waters. This rule, which is now fully recognized, is laid down in many authorities; amongst others are: Acton v. Blundell (1843), 12 M. & W. 324; Greenleaf v. Francis (1836), 18 Pick. (Mass.) 117; Bassett v. Salisbury Manufacturing Co. (1862), 43 N. H. 569; Goodale v. Tuttle (1864), 29 N. Y. 459; Swett v. Cutts (1870), 50 N. H. 439; Mosier v. Caldwell, supra.

3. The law recognizes no relative proprietary rights arising from prescription or ex jure natur $\alpha$ .

Assuming, therefore, a knowledge on the part of the reader of the ordinary law of surface water courses, we proceed to notice what has been established with reference to percolation, and to ascertain whether the fact that water percolates through one man's property to that of another gives rise to any mutual rights and obligations between the two land-owners.

It may be regarded as settled law that where water merely percolates through the earth, and either feeds a well or comes to the surface in a stream upon a piece of land other than that through which it percolates, the owner of said land has, ex jure naturæ, no right to demand that the percolations shall continue, and he cannot acquire such a right otherwise than by contract; in other words, the maxim, Aqua currit, et debet currere, ut solebat currere, does not apply to percolating water. When, therefore, a land-owner, by an act upon his own land, cuts off the hidden and un-

known current of water, to the destruction of a well or a stream upon the land of his neighbor, no action will lie. This has been established as the rule, both in England and America, after a course of litigation of considerable length and extent. In England, the first reported case upon the subject is the nisi prius case of Balston v. Bensted (1808), I Camp. 463, wherein Lord ELLENBOROUGH held that the right to have a spring supplied by percolation could be acquired by twenty years' exclusive enjoyment. The case, however, never went any further, and a juror was withdrawn. As pointed out in Chasemore v. Richards (1859), 7 H. of L. Cas. 365, by WIGHTMAN, J., the holding was but the dictum of an eminent judge, followed by no decision upon the point, and in view of the later decisions, Balston v. Bensted might have been included by Lord CAMPBELL in that famous fifth volume, which he sometimes threatened to publish, of "bad Ellenborough law." Whether the right to the supply of a well by percolation could be acquired was, however, treated as an open question by Sir LANCELOT SHADWELL, V. C., in Hammond v. Hall (1840), 10 Sim. 551.

The question of the right in percolating waters came before the Exchequer Chamber in 1846, in Acton v. Blundell, 12 M. & W. 324. In that case, it appeared that in 1821, the predecessor in title of the plaintiff had sunk on his land, a well for raising water for the working of his cotton mill, and that between 1837 and 1840, the defendants had, on the land of one of their number, sunk two coal pits, the effect of which was to so far diminish the supply to the plaintiff's well as to render it useless for the purpose of the cotton mill. It was held that an action could not be maintained for the injury to the well. TINDAL, C. J., in delivering the opinion of the Court said, after adverting to the law governing streams flowing over the surface of the land, and asserting that subterranean waters were not governed by the same rule:

The ground and origin of the law which governs streams running in their natural course, would seem to be this, that the right enjoyed by the several proprietors of the land over which they flow, is and always has been, public and notorious; that the enjoyment has been long continued in ordinary cases, indeed, time out of mind-and uninterrupted, each man knowing what he receives and what has always been received from the higher lands, and what he transmits and what has always been transmitted to the lower. The rule, therefore, either assumes as its foundation the implied assent and agreement of the proprietors of the different lands from all ages, or, perhaps, it may be considered as a rule of positive law (which would seem to be the opinion of Fleta and of Blackstone), the origin of which is lost by the progress of time; or it may not be unfitly treated, as laid down by Mr. Justice STORY in his judgment in the case of Tyler v. Wilkinson [1827, 4 Mason 402], as "an incident of the land; and that whoever seeks to found an exclusive use must establish a rightful appropriation in some manner known and admitted by the law." But in the case of a well sunk by the proprietor in his own land, the water which feeds it from a neighboring soil does not flow openly in the sight of the neighboring proprietor, but through the hidden veins of the earth beneath its surface; no man can tell what changes the underground sources have undergone in the progress of time; it may well be that it is only yesterday's date that they first took the course and direction which enabled them to supply the well. Again no proprietor knows what portion of water is taken from beneath his own soil, how much he gives originally, or how much he transmits only, or how much he receives; on the contrary, until the well is sunk and the water collected by draining into it, there cannot, properly, be said, with reference to the well, to be any flow of water at all. In the case, therefore, of the well, there can be no ground for implying any mutual consent or agreement, for ages past, between the owners of the several lands beneath which the underground springs may exist, which is one of the foundations on which the law as to running streams is supposed to be built; nor for the same reason, can any trace of a positive law be inferred from long continued acquiescence and submission, whilst the very existence of the underground springs or of the well may be unknown to the proprietors of the soil.

But the difference between the two cases, with respect to the consequences, if the same law is to be applied to both, is still more apparent. In the case of the running stream, the owner of the soil merely transmits the water over its surface; he receives as much from his higher neighbor as he sends down to his neighbor below; he is neither better nor worse; the level of the water remains the same. But if the man who sinks the well in his own land can acquire by that act an absolute and indefeasible right to the water that collects in it, he has the power of preventing his neighbor from making any use of the springs on his own soil which shall interfere with the enjoyment of the well. He has the power, still further, of debarring the owner of the land in which the spring is first found, or through which it is transmitted, from draining his land for the proper cultivation of the soil; and thus, by an act which is voluntary on his part, and which may be entirely unsuspected by his neighbor, he may impose on such neighbor the necessity of bearing a heavy expense, if the latter have erected machinery for the purposes of mining, and discovers, when too late, that the appropriation of water has already been made. Further,

the advantage on one side and the detriment to the other, may bear no proportion. The well may be sunk to supply a cottage, or a drinking place for cattle, whilst the owner of the adjoining land may be prevented from winning metals and minerals of inestimable value. And lastly, there is no limit of space within which the claim of right to an underground spring can be confined; in the present case, the nearest coal pit is at the distance of half a mile from the well; it is obvious this law must equally apply if there is an interval of many miles. Considering, therefore, the state of circumstances upon which the law is founded in the one case to be entirely dissimilar from those which exist in the other, and that the application of the same rule to both would lead in many cases, to consequences at once unreasonable and unjust, we feel ourselves warranted in holding upon principle, that the case now under discussion does not fall within the rule which obtains as to surface streams, nor is it to be governed by analogy therewith.

The Court expressly abstained from expressing what would have been its opinion, had the well been an ancient one.

We have quoted very fully from Sir NICHOLAS TIN-DAL'S opinion, and present it to the reader as a masterly statement of the reasons of the difference between the law applicable to surface and that applicable to underground waters. It will be observed that while the Court did not make any deliverance upon the question of the right to an ancient well, yet the argument of the Chief Justice tends very strongly to negative any acquirement of a right by prescription under ordinary circumstances, unless the doctrine applicable in England to ancient lights can be applied to an ancient well. But there is a marked difference in the two cases; in the case of the window, the neighboring landowner knows it is overlooking him, and that it depends for its use on his own inaction; in the case of the well, no matter how ancient, he ordinarily does not know, until he has made experiments by digging on his own soil, whether the well is supplied from that soil or not.

The next case of importance in England is *Dickinson et al.* v. *The Grand Junction Canal Co.* (1852), 7 Exch. 282, in which a case was sent by the Master of the Rolls to the Exchequer for an opinion, *inter alia*, upon the question whether the diversion of subterranean water (which would

otherwise have percolated to a stream used for the purpose of driving the plaintiff's mill, which diversion was caused by the digging of a well upon the defendants' land), was such an injury to the plaintiff that he could maintain an action therefor at common law. The Court held the action maintainable, saying:

As to the abstraction of the water which never did form part of the rivers, but has been prevented from doing so in its natural course, by the excavation of the well, whether the water was part of an underground water course or percolated through the *strata*, we are also of opinion that an action would lie. The mill owners were entitled to the benefit of the stream in its natural course; and they are deprived of part of that benefit if the natural supply of the stream is taken away.

Acton v. Blundell was noticed by POLLOCK, C. B., in the course of his opinion, and sustained on the ground that in such a case, i. e., the ruin of a well by mining operations, "the existence and state of underground water is generally unknown before the well is made, and after it is made, there is a difficulty in knowing certainly how much, if any, indeed, of the water of the well, when the ground was in its natural state, belonged to the owner in right of his property in the soil, and how much belonged to that of his neighbor who, in digging a moat or another well, may, possibly, be only taking back his own." The effect of Dickinson v. The Canal Co., therefore, if it be law, is to make the general rule, aqua currit, et debet currere, ut solebat currere, applicable to subterranean waters, and to refuse its enforcement in cases of uncertainty; in other words, simply to establish the rule, subject to the condition of the burden of proof of showing that the case falls within it. The case did not. however, long go unquestioned. It having been cited before the Exchequer in Broadbent v. Ramsbotham (1856), 11 Ex. 602, PARKE, B., interrupted counsel with the remark:

That case only decided that if a person has a right to a stream jure naturæ, he has a right to its subterranean course.

In 1857, the case of *Chasemore* v. *Richards*, 2 H. & N. 168, came, on error to the Exchequer, into the Exchequer

Chamber. The facts were as follows: The plaintiff was the owner of a mill, which for more than sixty years had been driven by the river Wandle. The river was largely fed by rain water which fell upon the district of Croydon and percolated to the river; in 1851, the Local Board of Health of Croydon sunk a large well some quarter of a mile from the river, and pumped water from said well for the supply of the town, at the rate of between, 500,000 and 600,000 gallons a day. Part of this water would naturally have flowed into the Wandle above the plaintiff's mill, and the abstraction was of a sufficient quantity of water to sensibly affect the working of the mill. It was held by the majority of the Court, WIGHTMAN, CRESSWELL, EARLE, WILLIAMS, CROMPTON and CROWDER, IJ., that there could be no recovery, and Dickinson v. The Grand Junction Canal Co., having been pressed upon the Court, CRESSWELL, J., in the course of the opinion of the Court, after quoting the portion of the opinion of POL-LOCK, L. C. B., as above, said:

The subject is dismissed with the simple assertion of the right, and we are not in possession of the reasoning by which the Court arrived at that conclusion. Another point decided in that case, viz.: that the company by sinking a well had broken their agreement, rendered the rights of the parties at common law immaterial to the decision of the case, and which may account for the dismissal of this novel point with so little observation.

The learned Judge likewise quoted Baron Parke's remark in *Broadbent* v. *Ramsbotham*, *supra*, and regarded the *Dickinson* case, if it went beyond the limits assigned by the Baron, as repudiated by the court by which it had been decided. Coleridge, J., dissented from the opinion of the court.

From the Exchequer Chamber the case was removed to the House of Lords (1859), 7 H. L. Cas. 349, where it was very freely argued by very eminent counsel, amongst others by Bovill, afterwards Lord Chief Justice of the Common Pleas, before whom the first Tichborne case was tried, and Sir Fitz Roy Kelly, the last of the Chief Barons, and, after the opinion of the judges had been asked by the House, the judgment of the Exchequer Chamber was affirmed. Lord

CHELMSFORD, L. C., regarded the case as ruled by Acton v. Blundell, supra, and referring to the strictures upon Dickinson v. The Grand Junction Canal Co. by CRESSWELL, J., and by Wightman, J., in delivering the opinion of the Judges to the House, expressed his entire concurrence with the Judges, and declared that the Dickinson case could hardly be regarded as a satisfactory decision upon the point under consideration. With Lord Chelmsford, Lords Cranworth, Kingsdown and Brougham concurred, and Lord Wensleydale, who, as Mr. Baron Parke, had criticized and limited the decision in Dickinson v. The Grand Junction Canal Co., did not advise a reviewal, but hesitated as to affirmance, because the water taken by the Croydon Board of Health was not for use on the land from which it was taken, but for the supply of the town.

This decision of the highest English court may be regarded as overruling Dickinson v. The Grand Junction Canal Co., and as having settled the law to be as above stated. This view is supported by Queen v. Metropolitan Board of Works (1863), 3 B. & S. 710; Grand Junction Canal Co. v. Shugar (1871), L. R. 6 Ch. App. 483, and see also Brain v. Marfell (1879), 28 Weekly Reporter 130, S. C. 20 AMERICAN LAW REGISTER 93, where the Court of Appeal (COLERIDGE, L. C. J., BRAMWELL and BRETT, L. JJ.) treated the law as absolutely settled, and counsel did not attempt to rely upon the Dickinson case, but endeavored to distinguish the case in hand from Chasemore v. Richards. The established rule was in Popplewell v. Hodkinson (1869), L. R. 4 Exch. 248, applied under rather peculiar circumstances, namely, where the draining of land not only cut off the water supply of the adjoining property, but deprived it of the support it had theretofore enjoyed from subterranean water, thereby causing the land itself to subside.

The same conclusion which has been arrived at in England, after considerable discussion and not without some hesitation, was reached in the United States at an earlier date. In *Greenleaf* v. *Francis* (1836), 18 Pick. (Mass.) 117, the

plaintiff had a well in his cellar; the defendant dug a well upon his own soil and, after that time, the water did not flow so copiously as formerly into the plaintiff's well. was held there could be no recovery. The question does not seem to have arisen again in the United States until the case of Roath v. Driscoll (1850), 20 Conn. 533, where it was decided the same way, Acton v. Blundell and Greenleaf v. Francis being cited. In 1855, was decided Wheatley v. Baugh, 25 Pa. 528, which, on account of the frequency with which it has been cited, and the clear and admirable opinion of Lewis, C. J., may be regarded as the leading American case on subterranean waters. That case decided in positive terms that no right existed in the owner of one piece of land to receive percolations through the land of another, and that such a right could not be acquired by prescription. In the course of the opinion, the learned Chief Justice said:

Percolations spread in every direction through the earth, and it is impossible to avoid disturbing them without relinquishing the necessary enjoyment of the land. Accordingly the law has never gone so far as to recognize in one man a right to convert another's farm to his own use, for the purposes of a filter. Such a claim, if sustained, would amount to a total abrogation of the right of property. \* \* \* Even if this right were admitted to exist, the difficulty in ascertaining the fact of its violation, as well as the extent of it, would be insurmountable. \* \* But it seems to be thought that the enjoyment of the spring by the plaintiff below and those under whom he claims, for the period of twenty-one years, gives him a right to its continued existence, although the neighboring proprietor may thereby be deprived of the chief value of his own land. This depends upon the question whether the enjoyment of the spring was such as to have invaded his neighbor's rights so as to enable the latter to maintain an action for the injury. No man can be barred by a statute of limitation for not bringing his action within the prescribed period, until it is first shown that he had a cause of action which he could have maintained, In analogy to the statute, no presumption can arise against a party on the ground of long enjoyment of a privilege by another, until it is shown that the privilege, in some measure, interfered with the rights of the party whose grant is proposed to be presumed, and that he had a legal right to prevent such enjoyment by proceedings at law. \* \* \* The owner of the mine had no right to complain of his neighbor below for making use of the spring on his own lands. As long as it flowed there, he had the right to make use of it, and the owner of the land through which the supply of water came, was not in any manner injured by such use of the water. Silence or acquiescence, where one is not injured and has no cause of complaint, can never deprive him of his rights on the ground of

presumption of a grant. No man can be said to have granted a right about which it would have been an impertinent interference to utter a complaint: Hoy v. Sterritt (1834), 2 Watts (Pa.) 331; Merlin's Repertoire de Jurisp. verb. "Cours d'Eau." Besides, it was impossible for him to know from whence the supply of water came. He had no knowledge that it was derived from percolations through his own land. In this respect there is a material difference between hidden veins of water under the ground and water courses flowing on the surface. The latter are apparent and, if appropriated in such a way as to injure the rights of the owner through whose land they flow, he can take cognizance of the wrong and is bound to redress it by action within the period prescribed by law. But the former is not apparent, and the owner of the land is not bound to resort to an action to redress a wrong of which he cannot by any possibility have notice.

As supporting the same general view of the law, see Ellis v. Duncan (1855), 21 Barb. (N. Y.) 230; Chatfield v. Wilson (1856), 28 Vt. 49; s. c. 5 AMERICAN LAW REGISTER (O. S.) 528; New Albany RR. Co. v. Peterson (1860), 14 Ind. 112; Frazier v. Brown (1861), 12 Ohio St. 294; Trustees of Delhi v. Youmans (1867), 50 Barb. (N. Y.) 316, affirmed (1871), 45 N. Y. 362; Swett v. Cutts (1870), 50 N. H. 439; S. C. II AMERICAN LAW REGISTER II; Mosier v. Caldwell (1872), 7 Nev. 363; Chase v. Silverstone (1873), 62 Me. 175; Taylor v. Fickas (1874), 64 Ind. 167; s. c. 18 AMERICAN LAW REGISTER 249; Coleman v. Chadwick (1875), 80 Pa. 81; Chesley v. King (1882), 74 Me. 164; Ocean Grove Camp Meeting Association v. Commissioners of Asbury Park (1885), 40 N. J. Eq. 447; Bloodgood v. Ayres (1885), 37 N. Y. S. C. 356, affirmed (1888), 108 N. Y. 400.

## 4. Reasons given for foregoing rule.

The reason assigned for the exemption of percolating water (and under this title we include water flowing in an unknown course), from the rules governing water courses, is generally based on the ground that water percolating is a part of the soil, or, at least, cannot be distinguished from it, so that if correlative rights as to a flow of percolating water were recognized between adjacent or neighboring owners, "the land-owner would be deprived of that absolute dominion over his soil which is his by the common law."

This position is supported by the opinion of TINDAL, C. J., in *Acton* v. *Blundell*, *supra*. In *Buffum* v. *Harris* (1858), 5 R. I. 243, it is said by AMES, C. J., in delivering the opinion of the Court:

Water, whether it has fallen as rain or has come from the overflow of a pond or swamp, which sinks into the top soil, and struggles through it, following no defined channel, is deemed by the law absolutely to belong to the owner of the land upon which it is found, for the avowed purpose of enabling him to cultivate his land by controlling or draining it off in the mode most convenient to him, and is not affected by any right in the owner of an adjoining river, pond or tank which it may chance for the time to feed, though that time be ever so long protracted. It is not water in a water course, or in an infinitesimal number of minute water courses, in the sense of being obedient to the law regulating the use of water flowing in such defined natural channels; but is in the eye of the law, as well as of common sense, the moisture and a part of the soil with which it intermingles, to be there used by the owner of the soil, if to his advantage, or to be got rid of in any mode he pleases, if to his detriment.

See also Mosier v. Caldwell, Trustees of Delhi v. You-maus, Chatfield v. Wilson, supra. This position is, however, strenuously attacked in Bassett v. Salisbury Manufacturing Co. (1862), 43 N. H. 569; S. C. 3 AMERICAN LAW REGISTER 223, in which case it is said by BARTLETT, J.:

Nor do we think that the maxim cited [cujus est solum, ejus est ad coelum et ad inferos] can be applied to establish an unqualified ownership of water in all cases any more properly than it can be relied upon to prove an absolute property in all the air within one's bounds. If the land owner has the absolute and unqualified ownership of all such water in or upon his land, his neighbor, by digging or otherwise, has no more right to take away his property water than his property sand. \* \* \* If the water, not gathered into natural water courses, belongs absolutely to the owner of the land, because it is part of the soil, and for that reason only, it must be subject to the same law as the other components of the soil \* \* \* which may not ordinarily be removed by an adjacent owner by the withdrawal of their natural support. \* \* \* But such a doctrine would lead to exactly the same mischiefs that have caused the rejection of the one first discussed. It would prevent all improvement or beneficial enjoyment of the land in precisely the same way.

Much of what is said by the learned Judge in the course of his opinion is, strictly speaking, *obiter dicta*, the case having been an action for obstructing the course of natural drainage by a dam; the doctrine of the case, however, goes

to the full extent above stated, and confines the right of a land-owner in dealing with subterranean percolating water to a reasonable use. The Judge frankly admits that the views adopted in this case by his Court are in conflict with the weight of authority outside of New Hampshire. Inside of that State, however, the doctrine has been recognized in Swett v. Cutts (1870), 50 N. H. 439, and perhaps the conflict between the two lines of authority may be reconciled by regarding the land-owner as vested with the absolute power of appropriation or disposition over the percolating subterranean water, provided he exercise the power while the water is upon his land. This, which would assimilate the water to a beast feræ naturæ, would, of course, not limit the landowner's right to a reasonable use; that is, if "reasonable" is to carry with it the idea of restriction, but it would get rid of the paradox suggested as arising from the theory which justifies the land-owner's dominion on the ground that the water is part of the soil. [See also II AMERICAN LAW REGISTER 11.

## 5. Application of rule to super and sub-jacent lands.

An interesting application of the principle that the land owner has the right to intercept percolations is found in Ballacorkish Silver, Lead and Copper Mining Co. v. Harrison (1873), L. R. 5 P. C. 49, when the question was between super and sub-jacent proprietors. In that case, a grant had been made by the Earl of Derby to the plaintiff's predecessors in the title of certain land in the Isle of Man, reserving mines and minerals. The right of the lord of the isle became, afterwards, vested in the Crown, which subsequently denied to the defendant (appellant) company the mines under the land of the plaintiff; in the course of the mining operations, the waters which otherwise would have risen to the surface were cut off. Counsel for the plaintiff endeavored to establish a distinction between cases involving adjoining lateral proprietors and the case before the Court, and also argued that the lord of the manor could not derogate from his own grant; but Lord Penzance said:

The reasoning, whatever weight attaches to it, appears to apply to the present case; but the respondent's argument admits of a more cogent The Court in both the cases cited [Acton v. Blundell, Chasemore v. Richards dwelt upon the extreme difficulty, if not impossibility of pursuing the courses of this natural percolation of water, so as to bring together cause and result, with that reasonable degree of certainty which ought to attend the enforcement of a legal right, and relied upon this difficulty as a prominent reason for declaring damage of this description to be damnum absque injuria. \* \* If, then, the lord is thus possessed of the mines as of his own original title in the soil, he has all the rights incidental to that ownership, and among others he has the right to the use of all waters found thereon and percolating by natural processes into the mines when opened. \* \* And the question is whether in exercising a right thus incident to the ownership reserved to him, he is derogating from anything which he has expressly, or by necessary implication, granted to the tenants of the manor. Express grant of these springs for the use of the tenant, of course, there is none. \* \* If such a grant could be implied at all, therefore, it could only be so as part of the general ownership and dominion of the surface which carries with it, no doubt, the right to the use of the water falling upon it, or rising in the form of a spring, or at any time found upon it. But the same thing is true, as has been just pointed out of the ownership of the mines. How then are these respective rights to be reconciled? They cannot in a legal point of view, be distinguished from those of the owners of adjacent portions of the same close, the only difference being that the former are adjacent vertically instead of laterally. \* \* In what respect then do their rights differ from those of the owners of adjoining closes, who are strangers in title, each of whom is entitled by law to the water found upon his land, but neither of whom is entitled to complain of the loss of that water by natural percolation set in action by his neighbor's excavations.

It appears to their Lordships that the two cases are substantially identical, and that the same law must govern both. The grant of the surface cannot carry with it more than the absolute ownership of the entire soil would include. The absolute ownership is held not to include a right to be protected from loss of water by percolation into openings made in the soil of a neighboring owner. How, then, can the grant of the surface only be held to include such a protection?

### 6. Right to intercept percolation confined to land-owner.

The right to intercept percolating waters is strictly confined to the *owner* of land; if, therefore, one exercising a special right in land, *e. g.*, a municipality in the construction of a sewer, so construct works or disturb the soil upon which it has lawfully entered, that the well of an adjoining land-owner is rendered dry by interference with the natural percolation, the person or body exercising the right is responsible in damages: *Trowbridge* v. *Brookline* (1887), 144

Mass. 139, and see Parker v. Boston and Maine RR. (1849), 3 Cush. (Mass.) 107.

The case of *Hougan* v. *The Milwaukee and St. Paul RR. Co.* (1872), 35 Iowa 558, at first sight seems to conflict with this rule, but an examination of the opinion as applied to the facts, shows that the Court had no intention of departing from the law as generally understood. In that case, the defendant held by a deed which conveyed to it "for all purposes connected with the construction, use and occupation of said railway, the right of way over and through" certain land of the plaintiff. The company, for the purpose of supplying its engines with water, dug a well within the limits of its right of way, with the effect of materially diminishing the supply of water to a spring on the plaintiff's land. It was contended that as the defendant was not owner of the land, it was liable for the diversion of the percolation. The Court said, by Cole, J.:

But the defendant in this case is not the absolute and unqualified owner, or owner in fee of the land whereon the well was dug. The defendant, however, is owner by grant from the plaintiff of "the right of way over and through the land for all purposes connected with the construction, use and occupation of its railway." We have not been referred to, nor have we been able to find, any case deciding this question. Upon principle, it is very close; and yet we find ourselves agreed in holding with the learned judge who decided the cause below, that under the terms of the conveyance and the facts of the case the defendant had the legal right to dig the well, and cannot be enjoined from using the water therefrom for railway purposes. \* \* The cause of action arises from the wrongful act of digging the well, and not from the consequences which flow from it. For if the right to dig the well exists, these latter are damnum absque injuria. Now that the digging of wells to supply water to its engines is one of the "purposes connected with the use of a railway," can scarcely admit of a doubt. The right to locate a water tank upon its right of way cannot be more clear than the right to dig a well to supply it; both are equally necessary to operate the road, and are fairly embraced in the phrase "all purposes connected with the construction, use and occupation of the railway."

Whatever may be thought of the soundness of the decision, it is clear that it does not in any way attack the rule above stated, but is referable to the class of cases in which the rights of adjoining owners are restricted by contract; for which see *infra*.

### 7. Malicious interference with percolations.

In some books and opinions, it is said that where the land owner, in cutting off percolations from his neighbor, acts *maliciously*, he may be held liable for the damage thereby done to his neighbor. This position has been vigorously attacked, and the weight of authority and reason seems, so far as the common law is concerned, to be against it. It is the rule of the civil law, as appears by the following citation from the Digest, Lib. 39, Tit. 3, §12:

Denique Marcellus scribit, cum eo qui in suo fodiens vicini fontem avertit, nihil posse agi, nec de dolo. Et sane actionem non debet habere, si non animo vicino nocendi, sed suum agrum meliorem faciendi id fecit.

There are several dicta which seem to recognize this rule as existing at the common law, but we are unable to find any decided case in which malice has been made a ground of recovery. In Greenleaf v. Francis (1836), 18 Pick. (Mass.) 117, PUTNAM, J., after speaking of the right of the land owner with reference to percolations, said "These rights should not be exercised from mere malice"; but whether he laid down a rule of law or simply stated what all must admit, in the abstract, to be a sound position in morals is both doubtful and immaterial, for the question of malice was not involved in the case. A dictum of LEWIS, C. J., in Wheatley v. Baugh (1855), 25 Pa. 528, also recognizes a liability in case of malice. In Haldeman v. Bruckhardt (1863), 45 Pa. 514, STRONG, J., after quoting the passage from the Digest above cited, apparently regards the civil law rule as incorporated in the common law, but goes on to say that there was no evidence of malice or of negligence on the part of the defendant in the case before him, and it does not seem to have been contended in the Court below that any malice existed. BOARDMAN, J., in the Trustees of Delhi v. Youmans (1867), 50 Barb. (N. Y.) 316, recognized the existence of malice as causing an exception to the rule of the non-accountability of the land owner, but in that case no malice was alleged; and in Chesley v. King (1882), 74 Me., 164, after a careful consideration, in which the cases of

Chatfield v. Wilson and Phelps v. Nowlen, infra, were before the Court, the exception was upheld, although the facts of the case were not regarded as bringing it within the exception. This is the nearest to a direct authority that we have been able to find in favor of the exception, and it, too, must be relegated to the class of dicta. See also Brown v. Illius (1858), 27 Conn. 84; Redman v. Forman (1885), 83 Ky. 214. The dictum of BRINCKERHOFF, J., in Frazier v. Brown (1861), 12 Ohio St. 294, seems to stand by itself; it is as follows: "Subject only to the possible exception of a case of unmixed malice, the maxim, 'cujus est solum, ejus est usque ad coelum et ad inferos,' applies to its full extent."

On the other hand, the existence of the exception has been strenuously denied. In *Chatfield* v. *Wilson* (1855), 28 Vt. 49, Bennett, J., in delivering the opinion of the Court, insisted that there were no correlative rights amongst landowners, arising out of subterranean percolating waters such as existed with regard to surface streams, and that an act violating no right could not be made actionable on account of the motive which induced it. In *Phelps* v. *Nowlen* (1878), 72 N. Y. 39, we have a direct decision upon the question. In that case, the Court below found:

That when the defendant dug his ditch, he supposed that the water in the plaintiff's well communicated in some hidden and undefined way with the water in his spring; that he expected the lowering of the spring would be followed by a diversion of subsurface water from the well and a consequent depression of the surface of the water in the well; that he intended to produce that result; that he dug the ditch for that purpose and no other, and that in so far as such intent and purpose, under the circumstances above found, can constitute malice, his motive was malicious.

In the Court above, the defendant had judgment, and MILLER, J., in delivering the opinion, after admitting that the defendant had acted maliciously, said (citing the earlier New York cases):

These cases tend to establish the doctrine in this State, that if a man has a legal right, courts will not inquire into the motive by which he is actuated in enforcing the same. A different rule would lead to the encouragement of litigation and prevent, in many instances, a complete and full enjoyment of the right of property which inheres to the owner of the soil.

The learned Judge also characterized the doctrine announced in *Trustees of Delhi* v. *Youmans* (1867), 50 Barb (N. Y.) 316, 320, as *obiter*, and as not sustained by the authorities cited.

Lord Wensleydale also, in *Chasemore* v. *Richards* (1859), 7 H. of L., cases 349, 387, after stating that the civil law deemed an act, otherwise lawful, illegal if done *animo vicini nocendi*, and that the law of Scotland was the same, added, "but this principle has not found a place in our law." This testimony to the law is all the more important, because all through his opinion the noble and learned Lord showed a tendency to limit the exercise of the right of the land-owner, more strictly than in the judgment of the other law lords who delivered opinions, it should be limited.

8. Contractual regulation of rights in subterranean waters.

Of course, it is always in the power of land owners to establish between themselves correlative rights and obligations with reference to percolating waters, as in any case a man may by contract acquire a right in his neighbor's land or limit the exercise of his own upon his own soil, and, therefore, where there is a covenant between the parties, or a grant existing, with reference to the use by one land owner of his land so far as concerns subterranean water, he cannot, when he has intercepted percolating water, rely upon his common law right to do so without being accountable to his neighbor for injury worked to him thereby, but his liability or nonliability will be determined by the proper construction of the covenant or grant and for acts done in violation or derogation thereof the land owner will be responsible: Whitehead v. Parks (1858), 2 H. & N. 870; Johnstown Cheese Manufacturing Co. v. Veghte (1877), 69 N. Y. 16; Chamberlain v. Baltimore & Ohio RR. Co. (1887), 66 Md. 518. But to limit the common law right of the land owner, the grant or contract must be express. A limitation cannot be inferred from a mere grant of land, on the principle that a grantor cannot derogate from his grant; see Ballacorkish Silver, Lead & Copper Mining Co. v. Harrison (1873), L. R. 5 P. C. 49, supra; or from the mere grant of a spring; thus in Bliss v. Greeley (1871), 45 N. Y. 671, a grant was made to the plaintiff by the defendant's predecessor in title of "the right and use, to dig, stone up or box up a certain spring of water situated on the land of the said H." It was held that this grant did not prevent the defendant from digging a well on another part of the premises, the effect of which was to render the plaintiff's well useless. Peckham, J., in delivering the opinion of the Court, said:

Whitehead v. Parks is an instructive case, but I do not think it controls this. The grant there was much broader than here. \* \* The grant here is limited and specific. It grants the right to dig and box up a spring and to insert a pipe therein and conduct it over the grantor's land. This did not make a servient estate of the grantor's whole farm. It is difficult to see how the plaintiff acquired more thereby than if he had obtained a grant in fee of the land including the spring and the track of the pipe. Under a grant in fee, it is quite clear that he could have no relief against the acts found in this case. \* \* \* This grant prevents the grantor and his assigns from any substantial interference with the spring or the pipe. It does not prevent their improvement or use of the residue of the farm. Had the parties designed to make the whole farm servient to this easement, they should have expressed that purpose. In the absence of such expression the grantor is permitted to use the residue of his farm, as any proprietor may his land.

9. Land-owner not responsible for percolation of pure water, unless he have accumulated it by artificial means.

From the right of the owner of land to deal as he pleases with his own soil, irrespective of the effect his action may have upon the percolating water, it follows that, unless he act negligently, he is not responsible for damage done by the percolation of pure water to the land of another: Smith v. Kenrick (1849), 7 Man. Gran. & S. 515. If, however, he accumulate water upon his premises, and by reason of the increased pressure on the soil, water is driven through it to the injury of the neighbor's property, he is responsible therefor. This is the principle of the well-known case, Rylands v. Fletcher (1868), L. R. 3 H. of L. 330, and is supported by Monson & Brimfield Manufacturing Co. v. Fuller (1834), 15 Pick. (Mass.) 554; Fuller v. Chicopee Manufacturing Co. (1860), 16 Gray (Mass.) 46; Pixley v. Clark (1866), 35 N. Y. 520; Wilson v. New Bedford (1871), 108

Mass. 261; Snow v. Whitehead (1884), L. R. 27 Ch. D. 588; s. c. 24 AMERICAN LAW REGISTER 230; Parker v. Larsen, decided by the Supreme Court of California, October 30, 1890. It is referable, rather, to the head of negligence, or of tort in endeavoring to impose upon the adjoining property a burden of lateral support in excess of that imposed upon it by law (which is at most simply that of supporting its adjoiner in its natural state), than to the law of waters, properly speaking.

## 10. Pollution of Percolating Waters.

The next question which arises is the liability of the owner of land if he pollute the percolations which flow through his land, so that the water which reaches his neighbor through the earth is ruined or rendered useless to him for the purposes for which it is required; and this question must be considered independently of, and must be kept distinct from, two classes of cases; the first, where a liability arises from the negligent doing of a lawful act upon the defendant's premises, as in Woodward v. Aborn (1853), 35 Me. 271, where the defendant had placed a heap of manure on his premises near to the plaintiff's well and, having been notified to remove it, allowed it to remain for two days, after which time came on a heavy rain, which soaked through the manure and ran into the plaintiff's well; and see Stainton v. Woolrych (1856), 23 Beav. 225; the second, where the injury to the plaintiff's water is done by the percolation of oil, gas or other offensive matters themselves, as in Pottstown Gas Co. v. Murphy (1861), 39 Pa. 257; Columbus Gas Light Co. v. Freeland (1861), 12 Ohio St. 392; Ottawa Gas Light Co. v. Graham (1862), 28 Ill. 73, S. C. 38 Id. 346, which class of cases rests upon the doctrine of nuisance pure and simple, and upon the rule of law that no one has the right to cast upon the premises of another a noxious material.

The question of liability for fouling percolating waters is one upon which the authorities have differed. On the one side, it is said that the law will permit a land-owner to cut off or to entirely destroy his neighbor's water supply, so far as it depends upon percolation, and if he may so destroy it, it would be inconsistent to say he may not destroy it by rendering it useless through the deterioration of its quality. On the other hand, it is said that while the law contemplates the possibility of the exhaustion of subterranean water in the course of operations by a land-owner on his own premises, and also does not hold him to a knowledge of subterranean courses, yet it does not recognize his right to foul and communicate to his neighbor that which he does not use; and further, that he cannot well foul even subterranean water without knowing that he does so.

In this country, the decisions are conflicting. The earliest reported case on this subject seems to be *Brown* v. *Illius*, which was twice before the Supreme Court of Connecticut, the last time in 1858, reported in 27 Conn. 84. In that case, the defendant placed on his lot coal tar, gas lime and other offensive materials, which soaked into the ground and thus fouled subterranean waters by which the plaintiff's well was supplied. It was held that, so far as the damage complained of arose from this cause, the plaintiff had no cause of action, Storrs, C. J., saying:

We would also express our concurrence with the judge below in that part of his charge in which he instructed the jury that if, in this case, the water falling upon the noxious substances on the plaintiff's land, sunk into the ground and carried with it those substances and became commingled with subterraneous streams or currents, and they were by such streams or currents alone transmitted to the plaintiff's well and it was corrupted in this mode, there would be no violation by the defendant of the legal rights of the plaintiff, and therefore the latter, for any damage so occasioned, could not recover.

The next case is *Clark* v. *Lawrence* (1860), 6 Jones Eq. N. C. 83, where the Court held that if a cemetery were so located as by its use to injure the water of a neighboring well, the burial of the dead in the cemetery should be enjoined, and directed an issue to determine "whether the burial of the dead in the church lot mentioned in the pleadings, has produced, or, if continued, is likely to produce sickness in the plaintiff's family, or to impair their comfort, either by corrupting the air or the water in his wells." This case is

diametrically opposed to Greencastle v. Hazelett (1864), 23 Ind. 186, wherein it was held that the ruining of a spring through the discharge into it of subterranean streams and percolations fouled by passage through a cemetery was damnum absque injuria. In Ball v. Nye (1868), 99 Mass. 582, a defendant was held liable for injury done by the long continued percolation of foul water from his premises to a neighbor's well, and the Court did not expressly place the responsibility of the defendant on the ground of negligence, other than such negligence as could be inferred from a failure to prevent the communication of filth to the neighboring premises. Cooley, J., in Upjohn v. Richland Township (1881), 46 Mich. 542, comments upon Ball v. Nye, and upon Hodgkinson v. Ennor, infra, and points out that in both of these cases, consistently with the proper use of the defendant's premises, the exclusion of the foul matter from the water was practicable.

In Dillon v. Acme Oil Co. (1888), 56 N. Y. S. C. 565, it was held in the absence of evidence of negligence, that where oil percolated through the earth from the defendant's refinery until it struck water by which it was conveyed to the plaintiff's well, no action would lie. HAIGHT, J., in his opinion, distinguished the case from Womersley v. Church (Rolls, 1867), 17 Law Times Rep. (N. S.) 190, and Norton v. Scholefield (1842), 9 M. & W. 665, on the ground that in those cases the evidence showed that the filth itself had percolated to the water of the plaintiff.

An interesting case upon this subject is *Collins* v. *Chartiers Valley Gas Co.* (1890), 131 Pa. 143. In that case in boring for natural gas, the defendant drove its well through a vein of fresh water some seventy feet from the surface, which supplied the plaintiff's well, and at about seven hundred feet it passed through a large quantity of salt water, which, rising and mingling with the fresh water, ruined the plaintiff's well; evidence was given that the defendant ought to have anticipated that its well would encounter the salt water. In the court below, judgment was given for the defendant, and

Hodgkinson v. Ennor, which was cited to the Court, was regarded as against the weight of authority. On appeal, the decision was reversed. In the course of his opinion, MITCHELL, J., said:

Later cases, following Wheatley v. Baugh, have held that injury to springs, wells, etc., supplied by mere percolation, was not actionable, and the reason has always been the same, that the damage could not be foreseen or avoided. If the boundaries of knowledge have been so enlarged as to make an end of the reason, then cessante ratione, cessat ipsa lex. Geology is a progressive, and now in many respects a practical science: and as truly remarked by the learned judge below, in his opinion on the motion for a new trial, "since the decisions in Acton v. Blundell and Wheatley v. Baugh, probably more deep wells have been drilled in Western Pennsylvania than had previously been dug in the entire earth in all time. And that which was held to be necessarily unknown and merely speculative as to the flow of water underground, has been, by experience in such cases as this, reduced almost to a certainty." If this is the state of knowledge at the present day, if the existence of a stratum of clear water and its flow into wells and springs of the vicinity, and the existence of a separate and deeper stratum of salt water, which is likely to rise and mingle with the fresh when penetrated in boring for oil or gas, are known, and the means of preventing the mixing are available at reasonable expense, then, clearly, it would be a violation of the living spirit of the law not to recognize the change and apply the settled and immutable principles of right to the altered conditions of facts.

It is true the Court spoke of negligence in not guarding against the mingling, but as the omission could only be negligent if there were a danger of injuring (i. e., violating the right of) another, the case may be placed within the class of those which recognize the right of the receiver of percolations to be protected from the fouling thereof, unless such fouling is inevitable, while it may not go so far as to insure him that right at all events. The case came again to the Supreme Court in 1891, and the former decision was adhered to, but the matter of negligence was made more prominent, WILLIAMS, J., saying:

The ground of the defendant's liability is negligence, the want of reasonable care, under the circumstances, for the rights of others.

It will be seen, therefore, that the American cases are in state of conflict.

In England, in *Hodgkinson* v. *Ennor* (1863), 4 Best & Sm. 229, a sharp distinction was taken between the diversion of subterranean water and its pollution, by Lord Cockburn and Blackburn and Mellor, JJ., the Chief Justice saying in effect that the water once having been fouled by the defendant, it was unimportant by what route he went to the water of the plaintiff, and Mellor, J., saying:

There is a great distinction between the abstraction of water before it becomes the property of the plaintiff and sending polluted water into water to which he is entitled.

In Ballard v. Tomlinson (1884), L. R. 26 Ch. Div. 194, PEARSON, J., disregarded the distinction. In that case, plaintiff and defendant were adjoining land-owners; each had upon his premises a well, that of the plaintiff being at a lower level than that of the defendant, the two wells having a common source of supply in water which percolated underground from the defendant's to the plaintiff's land. fendant by a drain turned filth into his well which polluted the water which percolated to and injured the plaintiff's well. PEARSON, J., held that, as the plaintiff had no property in the underground water which came from the defendant's land, he had no cause of action against the defendant for polluting such water, saying, "as the defendants were clearly entitled to pump every drop of water out of their well and leave the plaintiffs with none, it would be no difference in principle if they deprived him of the water by rendering it unfit for use." This decision was criticized and differed from by Mr. Justice KAY in the Chancery Division in Snow v. Whitehead (1884), L. R. 27 Ch. Div. 588; S. C. 24 AMERICAN LAW REGISTER 230, and on the removal of Ballard v. Tomlinson to the Court of Appeal, the Court, consisting of BRETT, M. R., COTTON and LINDLEY, L. JJ., reversed the decision of Mr. Justice Pearson (1885), L. R. 29 Ch. D. 115. The Master of the Rolls said:

Has any one of those who have an unlimited right of appropriation, a right to contaminate that common reservoir or source as against those who have an equal right with him to appropriate where he does not, or is

he bound not to do anything which will prevent anybody to whom that unlimited right of appropriation shall come to have such water unaltered in quality? \* \* It seems to me that although nobody has any property in the common source, yet everybody has a right to appropriate it, and to appropriate it in its natural state, and no one of those who have a right to appropriate it has a right to contaminate that source so as to prevent his neighbor from having the full value of his right of appropriation. \* \* I disagree with the decision of Mr. Justice Pearson, on the ground that although nobody has any property in the percolating water, yet such water is a common source which everybody has a right to appropriate, and that, therefore, no one is justified in injuring the right of appropriation which everybody else has.

## COTTON, L. J., after adverting to *Chasemore* v. *Richards*, said:

But here, what is it the defendants are doing? They are not using that natural right; they are not taking the water, but they are putting upon their land filth, which gets down into the underground water in the water-bearing stratum, which is partly under their land and partly under that of their neighbor. They are, therefore, in no way exercising that right which a person who draws the water under his own land is exercising.

#### And LINDLEY, L. J., said:

The right to foul water is not the same as the right to get it; and in my opinion does not depend upon the same principles. *Prima facie*, every man has a right to get from his own land water which is naturally found there, but it frequently happens that he cannot do this without diminishing his neighbor's supply. In such a case, the neighbor must submit to the inconvenience; but *prima facie* no man has a right to use his own land in such a way as to be a nuisance to his neighbor, and whether the nuisance is effected by sending filth on to his neighbor's land, or by putting poisonous matter on his own land and allowing it to escape on his neighbor's land, or whether the nuisance is effected by poisoning the air which his neighbor breathes, or the water which he drinks, appears to me wholly immaterial.

# 11. Subterranean streams with unknown or undefined course, treated as percolations.

Where the course of a subterranean stream is unknown or not well defined, the law applicable to it is the same as that applied to percolating waters. It is true that in *Smith* v. *Adams* (1837), 6 Paige (N. Y.) 435, WALWORTH, Ch., expressed a contrary opinion, and would have sustained a bill to enjoin the diversion of an underground water course, on

the general principle that the owner of the superior heritage has no right to divert the water which passes through his land, to the injury of those who were accustomed to receive it upon their lands below, had the amount of the injury alleged been sufficient to bring the case within Chancery jurisdiction in New York, but the only authority relied upon by the learned Chancellor was *Balston* v. *Bensted* (1808), I Camp. 463, which is not now law, and the opinion, which goes further than the facts of the case required, seems to be now clearly opposed to the current of authority. In *Haldeman* v. *Bruckhardt* (1863), 45 Pa. 514, STRONG, J., in delivering the opinion of the Court, said:

A surface stream cannot be diverted without knowledge that the diversion will affect a lower proprietor. Not so with an unknown subterraneous percolation or stream. One can hardly have rights upon another's land which are imperceptible, of which neither himself nor that other can have any knowledge. No such right can be supposed to have been taken into consideration when either the upper or lower tract was purchased. The purchaser of lands on which there are unknown subsurface currents, must buy in ignorance of any obstacle to the full enjoyment of his purchase indefinitely downwards, and the purchaser of lands on which a spring rises, ignorant where and how the water comes, cannot bargain for any right to a secret flow of water in another's land. \* \* These appear to us very sufficient reasons for distinguishing between surface and subterranean streams, and denying to inferior proprietors any right to control the flow of water in unknown subterranean channels upon an adjoiner's land. They are as applicable to unknown subsurface streams as they are to filtrations and percolations through small interstices. Neither can be defined water courses, though they may be definable.

And in Lybe's Appeal (1884), 106 Pa. 626, GORDON, J., said, in delivering the opinion:

The rule is, that wherever the stream is so hidden in the earth that its course is not discoverable from the surface, there can be no such thing as a prescription in favor of an adjacent proprietor to have an uninterrupted flow of such stream through the land of his neighbor.

12. Known and defined subterranean streams governed by law applicable to surface water course.

Where, however, a subterranean stream flows in a known and well defined course, as is frequently the case in limestone regions, then the law with regard to it, is the same as that with reference to surface streams and the rule, aqua currit, et debet currere, ut solebat currere, applies. This is clearly set forth in the masterly opinion in Wheatley v. Baugh (1855), 25 Pa. 528, and was acted upon in Whetstone v. Bowser (1857), 29 Id. 59. This position is supported by the following cases, in all of which it is recognized, although in some the Court did not regard the alleged stream to be sufficiently well defined to come within the rule: Grand Junction Canal Co.v. Shugar (1871), L. R. 6Ch. App. 483; Cole Silver Mining Co. v. Virginia and Gold Hill Water Co. (1871), U. S. C. Ct. D. Nev., 1 Saw. 470; Hanson v. McCue (1871), 42 Cal. 303; Taylor v. Welch (1876), 6 Ore. 198; Hale v. McLea (1879), 53 Cal. 578; Shively v. Hume (1881), 10 Ore. 76; Strait v. Brown (1881), 16 Nev. 317; Burroughs v. Saterlee (1885), 67 Iowa 396; Cross v. Kitts (1886), 69 Cal. 217; Van Wycklen v. Brooklyn (1886), 48 N. Y. S. C. 418; Redman v. Forman (1885), 83 Ky. 214; Colrick v. Swinburne (1887), 105 N. Y. 503.

13. Law of subterranean water under Code in Georgia.

The law of Georgia with reference to the diversion of the water of underground streams, appears to be peculiar. The Code of that State declares that:

§ 3019. The course of a stream of water underground and its exact condition before its first use, are so difficult of ascertainment, that trespass cannot be brought for any supposed interference with the rights of a proprietor.

This section came before the Supreme Court for interpretation in Sadler v. Lee (1880), 66 Ga. 45, in which case it was alleged that the stream whose diversion was complained of, was, for the greater part, an underground stream but with its course and direction distinctly marked and, at intervals, running above ground "visible to any observer acquainted with such streams." In delivering the opinion of the Court, Crawford, J., said:

The evident intent and meaning of this Act is to declare that where water is underground, even though it may be a stream, and if its condition and course are not to be fixed and ascertained, then no supposed interference with the right of a proprietor will authorize a suit for trespass.

But suppose a case arises after the first use of the water running in a stream, though mostly underground, with its course and direction distinctly marked and at intervals running above ground and visible to any observer acquainted with such streams; and suppose that heavy investments have been made to utilize this stream of water and that profits arising therefrom have been enjoyed for a quarter of a century, or for even a shorter time, shall it be held that such proprietary rights are to be cut off and the property itself destroyed by construing the Act adversely to such proprietor. We cannot so hold [and, relying on Lewis, C. J., in Wheatly v. Baugh and Parke, B., in Dickinson v. Grand Junction Canal Co.], so that both upon reason and authority we hold that the proper construction of our Act is, that where the exact course and condition of a stream of water after its first use are well defined and ascertained and the interference with the rights of the proprietor using the water of this stream is not such as is supposed but positive and certain, then trespass lies.

This interpretation of the Code takes away the apparent peculiarity and places the law of Georgia on a plane with the common law as ordinarily understood.

14. Act forbidding waste of subterranean waters in Colorado.

The only act affecting the use of subterranean waters, beside the Georgia Act just cited, unless we consider as such an act for the encouragement of the sinking of artesian wells by an award of State bounties (Nevada Act, March 5, 1887, Laws, page 119), or providing for a system of such wells under State supervision (Dakota T. Act, March 7, 1887, Laws, ch. 7, page 15), is the Act of the State of Colorado, passed April 4, 1887 (Laws, pages 52–3), entitled:

An Act to regulate the use of artesian wells, and to prevent the waste of subterranean waters in the State, and prescribing penalties for a violation of the provisions hereof.

SECTION 1. Any artesian well which is not tightly cased, capped, or furnished with such mechanical appliances as will readily and effectively arrest and prevent the flow of water from such well, is hereby declared to be a public nuisance. The owner, tenant or occupant of the land upon which such well is situated, who causes, permits, or suffers such public nuisance, or suffers or permits it to remain or continue, is guilty of a misdemeanor.

SEC. 2. Any person owning, possessing or occupying any land upon which is situated an artesian well, who causes, suffers or permits the water to unnecessarily flow from such well, or to go to waste, is guilty of a misdemeanor.

SEC. 3. An artesian well is defined, for the purposes of this Act, to be any artificial well, the waters of which, if properly cased, will flow con-

tinually over the natural surface of the ground adjacent to such well, at any season of the year. *Provided*, Nothing in this Act shall apply to water flowing from mining shafts.

SEC. 4. Waste is defined, for the purpose of this Act, to be the causing, suffering or permitting the waters flowing from such well to run into any river, creek or other natural water course, superficial or underground channel, bayou, or into any sewer, street, road, highway, or upon the land of any person other than that of the owners of such well, or upon the public lands of the United States, or of the State of Colorado, unless it be used thereon for the purpose and in the manner that it may be lawfully used upon the land of the owner of such well; *Provided*, That this section shall not be [so] construed as to prevent the use of such waters for the proper irrigation of trees standing along or upon any street, road or highway, or for ornamental ponds or fountains, or propagation of fish, or for agricultural purposes when irrigation is not practicable by any other means.

The remaining sections prescribe the penalty and the method of enforcing it, and also provide for the keeping of records of the depth and thickness of the different *strata* penetrated.

Henry Budd.

Philadelphia.

[To the preceding interesting article may be added these additional references to briefer essays upon the same important subject: Ballard v. Tomlinson has been justified by Judge Bennett in his annotation to the case: 24 AMERICAN LAW REGISTER 638-40, upon the wild animal theory that the defendants were liable for the escape of their sewage without regard to the mode of transmission. Numerous cases are cited by the annotator. The liability was recognized in Kentucky in Kinnard v. Standard Oil Co., January 25, 1890, where Ballard v. Tomlinson was followed, upon the principle that "one must so use his property as not to injure his neighbor." Bassett v. Salisbury Manufacturing Co. is briefly annotated by Judge Redfield in 3 American Law Register 238-40, with a reference to a summary review of the English decisions in The London Jurist of November 28, 1863. Brain v. Marfell, reported in 20 AMERICAN LAW REGISTER 93-7, is briefly annotated by Judge Ben-NETT upon the question of malice in cutting off percolations, though nothing more definite is concluded than by Mr. Budd, supra, page 251.

Rights in Subterranean Waters is a valuable leading article in 2 AMERICAN LAW REGISTER (1862), 65-76, by Hon. Emory Washburn, author of the well-known text book on Easements. The writer did not seek to exhaust the cases then decided, but rather to go only so far into the examination as to be able to deduce propositions. The most important of these is that the doctrine of prescriptive rights cannot properly be applied to the enjoyment of water percolating through the earth.—ED.